

## **REMARKS**

This is responsive to the Office Action mailed September 24, 2007 ("Office Action").

### **Claim Amendments**

Claims 4, 8-10, and 18-37 have been withdrawn from consideration as being drawn toward a non-elected invention. Claim 12 has been amended to correct an informality.

### **Election/Restriction**

Applicant confirms the election of species a1, b1, c1, d1, e2, and f1 of Group I. Applicant confirms that claims 1-3, 5-7, and 11-17 are drawn toward the elected species. Applicant confirms that claims 4, 8-10, and 18-37 are withdrawn from consideration. Applicant reserves the right to file one or more divisional applications directed toward the non-elected inventions.

### **Claim Objection**

Claim 12 stands objected to because of an informality. Claim 12 has been amended accordingly.

### **Claim Rejections – 35 U.S.C. §103**

Claim 1 is rejected under 35 U.S.C. §103(a) as being unpatentable over Hampden-Smith et al. (US 2005/0112056) in view of Edlund et al. (US 2002/0114984).

Claim 1 discloses a fuel supply apparatus for providing a continuous supply of a hydrogen-rich reformat comprising the following: (1) a reforming reactor comprising a catalyst bed for converting a hydrocarbon fuel to a reformat, the catalyst bed comprising a reforming catalyst and a carbon dioxide fixing material; (2) a hydrogen storage device in fluid communication with the reforming reactor for

storing a portion of the reformat; (3) a reformat outlet in fluid communication with the hydrogen storage device; and (4) a controller in communication with the reforming reactor and the hydrogen storage device for controlling the delivery of reformat to the reformat outlet.

According to the Examiner, Hampden-Smith discloses a fuel supply apparatus for providing a hydrogen-rich reformat. [Office Action, p. 3.] However, according to the Examiner, Hampden-Smith does not disclose a controller in communication with the reforming reactor and the hydrogen storage device for controlling the delivery of reformat to the reformat outlet. [Office Action, p. 4.] The Examiner relies on the controller of Edlund. [Office Action, p. 4.] According to the Examiner it would have been obvious to one of ordinary skill in the art to add a controller, as in Edlund, to the communication means from the reforming reactor to the hydrogen storage device of Hampden-Smith.

Neither Hampden-Smith nor Edlund discloses a fuel supply apparatus for providing a continuous supply of hydrogen-rich reformat as is disclosed in claim 1 of the present invention. Neither Hampden-Smith nor Edlund teaches or suggests a fuel supply apparatus for providing a continuous supply of hydrogen-rich reformat as is disclosed in claim 1 of the present invention.

Hampden-Smith or Edlund alone or in combination do not teach or suggest a fuel supply apparatus for providing a continuous supply of hydrogen-rich reformat as is disclosed in claim 1 of the present invention. As a result, claim 1 is not unpatentable over Hampden-Smith in view of Edlund. Reconsideration and withdrawal of the rejection of claim 1 under §103(a) is respectfully requested.

Claims 1-3, 5-7, and 11-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sircar et al. (US 6,103,143) in view of Edlund et al. (US 2002/0114984).

Claim 1 and the claims which depend from claim 1 disclose a fuel supply apparatus for providing a continuous supply of a hydrogen-rich reformat comprising the following: (1) a reforming reactor comprising a catalyst bed for converting a

hydrocarbon fuel to a reformat, the catalyst bed comprising a reforming catalyst and a carbon dioxide fixing material; (2) a hydrogen storage device in fluid communication with the reforming reactor for storing a portion of the reformat; (3) a reformat outlet in fluid communication with the hydrogen storage device; and (4) a controller in communication with the reforming reactor and the hydrogen storage device for controlling the delivery of reformat to the reformat outlet.

According to the Examiner, Sircar discloses a fuel supply apparatus for providing a hydrogen-rich reformat. [Office Action, p. 5.] However, according to the Examiner, Sircar does not disclose the placement of the preferential fuel processing apparatus in a fuel cell and fuel processing system with a compressor and high pressure storage device. [Office Action, p. 5.] In addition, according to the Examiner, Sircar does not disclose a controller that controls the operation of the hydrogen storage device and the flow rate of reformat to the hydrogen storage device. [Office Action, p. 5.] The Examiner relies on the fuel processing system of Edlund. [Office Action, p. 5.] According to the Examiner, it would have been obvious to one of ordinary skill in the art at the time of the invention to add the fuel processing system of Edlund to the reforming reactor of Sircar. [Office Action, p. 6.]

Neither Sircar nor Edlund discloses a fuel supply apparatus for providing a continuous supply of hydrogen-rich reformat as is disclosed in claim 1, and the claims which depend from claim 1, of the present invention. Neither Sircar nor Edlund teaches or suggests a fuel supply apparatus for providing a continuous supply of hydrogen-rich reformat as is disclosed in claim 1, and the claims which depend from claim 1, of the present invention.

Sircar or Edlund alone or in combination do not teach or suggest a fuel supply apparatus for providing a continuous supply of hydrogen-rich reformat as is disclosed in claim 1, and the claims which depend from claim 1, of the present invention. As a result, claim 1 and the claims which depend from claim 1 are not unpatentable over Sircar in view of Edlund. Reconsideration and withdrawal of the rejection of claims 1-3, 5-7, and 11-17 under §103(a) is respectfully requested.

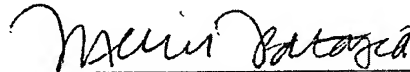
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Conclusion

All of the stated grounds of objection and rejection are believed to have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicant believes that a full and complete response has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment is respectfully requested.

Respectfully submitted,



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